Commonwealth of Kentucky

Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

AIR QUALITY PERMIT

Permittee Name: Southwire Company

Mailing Address: One Southwire Drive, Carrollton, Georgia 30119

Source Name: Southwire Company

Mailing Address: P.O. Box 336, State Route 271 North

Hawesville, Kentucky 42348

Source Location: 1987 State Route 127 North, Hancock, Kentucky

PERMIT TYPE: Federally-Enforceable

Review Type: Title V

Permit Number: V-98-008 Log Number: F064

Application

Complete Date: February 14, 1997

KYEIS ID #: 077-1580-0009 AFS Plant ID: 21-091-00009

SIC Code: 3355

Region: Evansville-Owensboro-Henderson

County: Hancock

Issuance Date: Expiration Date:

John E. Hornback, Director Division for Air Quality

DEP7001 (1-97)

TABLE OF CONTENTS

<u>SECTION</u>		<u>DATE</u> OF ISSUANCE	PAGE
		<u>OF ISSUANCE</u>	PAGE
SECTION A	PERMIT AUTHORIZATION		1
SECTION B	EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS		2
SECTION C	INSIGNIFICANT ACTIVITIES		18
SECTION D	SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS		19
SECTION E	SOURCE CONTROL EQUIPMENT OPERATING CONDITIONS		19
SECTION F	MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS		20
SECTION G	GENERAL CONDITIONS		22
SECTION H	ALTERNATE OPERATING SCENARIOS	26	
SECTION I	COMPLIANCE SCHEDULE		26

Permit Number: <u>V-98-008</u> **Page:** <u>3</u> **of** <u>26</u>

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application which was determined to be complete on February 14, 1997, the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.



Permit Number: $\underline{V-98-008}$ Page: $\underline{4}$ of $\underline{26}$

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Group Requirements

01 (S1) Melt Furnace

Description:

A SMD model 100 melt furnace with a maximum processing rate of 7.42 tons of aluminum per hour and a maximum natural gas usage rate of 25 mmBTU / hr, with backups of No. 2 fuel oil or propane.

Construction commenced - 1969.

02(S2) Melt Furnace

Description:

A Warwick melt furnace with a maximum processing rate of 13.7 tons of aluminum per hour and a maximum natural gas usage rate of 25 mmBTU / hr, with backups of No. 2 fuel oil or propane. Construction commenced - 1969.

03 (S4) Holding Furnace

Description:

A Warwick holding furnace with a maximum processing rate of 8.1 tons of aluminum per hour and a maximum natural gas usage rate of 10 mmBTU / hr, with backups of No. 2 fuel oil or propane. Construction commenced - 1969.

04 (S5) Holding Furnace

Description:

A Warwick holding furnace with a maximum processing rate of 8.1 tons of aluminum per hour and a maximum natural gas usage rate of 7 mmBTU / hr, with backups of No. 2 fuel oil or propane. Construction commenced - 1969.

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing process operations 401 KAR 61:035, Existing Process Gas Streams

1. **Operating Limitations:**

None

2. Emission Limitations:

Pursuant to Regulation 401 KAR 61:020:

- a) Visible emissions shall not equal or exceed 40 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.
- b) Hourly particulate emissions as measured by Reference Method 5, Appendix A, 40 CFR 60, averaged over three hours shall not exceed the limit calculated by the following formula:

$$E = 4.10 P^{0.67}$$

Where P is the process weight (total weight of all materials introduced into the emission unit which may cause the emissions of particulate matter) in tons/hour. If the process

Permit Number: <u>V-98-008</u> **Page:** <u>5</u> **of** <u>26</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (continued)

Group Requirements(continued)

2. Emission Limitations:(continued)

weight equals or is less than 0.5 ton/hour the particulate matter emission limitation shall be 2.58 lbs/hr.

Pursuant to 401 KAR 61:035:

 SO_2 in the process gas stream shall not exceed 239 grains per 100 dscf at zero percent oxygen.

3. <u>Testing Requirements:</u>

Compliance tests as required in Section D.

4. **Specific Monitoring Requirements:**

- a) To provide reasonable assurance that the visible emission limitations are being met the permittee shall:
 - i) perform from each stack or vent opacity readings using Reference Method 9 determine each calendar quarter, or more frequently if requested by the Division. Opacity readings shall be conducted while the emission units are operating.
 - ii) perform a qualitative visual observation of the opacity of emissions from each stack/vent on a daily basis and maintain a log of the observation. The log shall note:
 - 1) whether any air emissions (except for water vapor) were visible from the vent/stack,
 - 2) all emission points from which visible emissions occurred, and
 - 3) whether the visible emissions were normal for the process.
 - iii) determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent is perceived or believed to exceed the applicable standard.
- b) To provide reasonable assurance that the particulate matter emission limitations are being met, the permittee shall monitor the amounts and types of process weight added to each emissions unit. The process weight shall be determined in average hourly tons added to each emission unit averaged over a one month period.

The average particulate emissions shall be calculated as follows:

$$PE = PW \times PEF$$

Where PE = particulate emissions in lbs/hr, PW = process weight in tons/hr, and PEF = particulate emission factor in lbs/ton of process weight.

The particulate emission factors shall be the number determined from the compliance test required in Section D or other emission test or emission factors approved by the Division.

Permit Number: <u>V-98-008</u> **Page:** <u>6</u> **of** <u>26</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (continued)

Group Requirements(continued)

5. Specific Record Keeping Requirements:

Records shall be maintained of the daily visual observations, the calendar quarter observations by Reference Method 9, and the amounts and types of process weight added to each emissions unit.

6. Specific Reporting Requirements:

Any exceedance over the opacity, particulate emissions, fuel oil usage, or sulfur dioxide limits as stated in this permit shall be reported to the Division as specified in Section F (6). The company shall also certify to the Division, annually, that a daily visible emission survey is conducted and the specified records are being kept for this emission point. If more than two exceedances occur in any rolling six months, the owner or operator shall submit to the Division's Owensboro Regional Office no later than 30 days from the second exceedance a corrective action plan for the Division's approval.



Permit Number: <u>V-98-008</u> **Page:** <u>7</u> **of** <u>26</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (continued)

14 (S3) - Melt Furnace

Description:

A SMD, Model 125, melt furnace with maximum processing rate of 13 tons of aluminum per hour and a maximum natural gas usage rate of 25 mmBTU per hour, with backups of No. 2 fuel oil and propane.

Construction commenced - 1992

APPLICABLE REGULATIONS:

401 KAR 59:010, New Process Operations 401 KAR 59:105, New Process Gas Streams Self-imposed limitations to preclude PSD

1. **Operating Limitations:**

Only natural gas, No. 2 fuel oil, and propane shall be used.

Fuel oil usage rate shall not exceed 91,000 gallons/month and the sulfur in the fuel oil shall not exceed 0.5% sulfur.- Self imposed to preclude applicability of 401 KAR 51:017, Prevention of significant deterioration.

2. Emission Limitations:

Pursuant to Regulation 401 KAR 59:010:

- a) Visible emissions shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.
- b) Hourly particulate emissions as measured by Reference Method 5, Appendix A, 40 CFR 60, averaged over three hours shall not exceed the limit calculated by the following formula or 5.6 lbs/hr (self-imposed) whichever is less:

$$E = 3.59 P^{0.62}$$

Where P is the process weight (total weight of all materials introduced into the emission unit which may cause the emissions of particulate matter) in tons/hour. If the process weight equals, or is less, than 0.5 ton/hour the particulate matter emission limitation shall be 2.34 lbs/hr.

Self-imposed limitation to preclude PSD:

- a) Hourly PM₁₀ emissions as measured by Reference Method 201 or 201a, Appendix M, 40 CFR 51, and averaged over three hours shall not exceed 3.4 lbs/hr.
- b) Sulfur dioxide emissions as measured by Reference Method 6 or 6c, Appendix A, 40 CFR 60, and averaged over three hours shall not exceed 3.25 tons/month.

Permit Number: $\underline{V-98-008}$ Page: $\underline{8}$ of $\underline{26}$

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (continued)

Pursuant to 401 KAR 59:105:

SO₂ in the process gas stream shall not exceed 28.63 grains per 100 dscf at zero percent oxygen.

3. Testing Requirements:

Compliance tests as required in Section D.

4. Specific Monitoring Requirements:

- a) To provide reasonable assurance that the visible emission limitations are being met the permittee shall:
 - i) perform from each stack or vent opacity readings using Reference Method 9 determine each calendar quarter, or more frequently if requested by the Division. Opacity readings shall be conducted while the emission unit are operating.
 - ii) perform a qualitative visual observation of the opacity of emissions from each stack/vent on a daily basis and maintain a log of the observation. The log shall note:
 - 1) whether any air emissions (except for water vapor) were visible from the vent/stack,
 - 2) all emission points from which visible emissions occurred, and
 - 3) whether the visible emissions were normal for the process.
 - iii) determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent is perceived or believed to exceed the applicable standard.
- b) To provide reasonable assurance that the particulate matter emission limitations (TSP and PM₁₀) are being met, the permittee shall monitor the amount and type of process weight added to each emissions unit. The process weight shall be determined in average hourly tons added to the emission unit averaged over a one month period. Average particulate emissions shall be calculated as follows:

$$PE = (PW \times PEF) + Fuel$$

Where PE = Particulate emissions in lbs/hr, PW = process weight in tons/hr, PEF = particulate emission factor in lbs/ton of process weight, and Fuel = particulate emissions in lbs/hr as calculated below. The particulate emission factor shall be developed from compliance test required in Section D or other emission test or emission factor approved by the Division. If more than one type of fuel is used during the month the highest hourly fuel particulate emission rate shall be used to demonstrate compliance. Fuel emissions shall not be added for compliance with 401 KAR 59:010, but shall be added to comply with self-imposed limitations.

Fuel particulate emissions shall be calculated as follows:

Fuel = particulate emission factor x hourly fuel usage averaged monthly.

Permit Number: <u>V-98-008</u> **Page:** <u>9</u> **of** <u>26</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (continued)

The fuel particulate emission factor (expressed in the proper units) shall be the appropriate factor specified in <u>Compilation of Air Pollutant Emission Factor</u> (AP 42) or an emission test or emission factor approved by the Division.

c) To provide reasonable assurance that the sulfur dioxide emission limitations are being met, the permittee shall monitor monthly the amount, sulfur content, and the type of fuel oil used.

5. Specific Record Keeping Requirements:

Records shall be maintained of the visual observations, calendar quarter Reference Method 9, combined amount and type of fuel oil used, the sulfur content of each fuel oil used, and the amount of process weight added to each emissions unit. These records shall be maintained for 5 years and made available for review upon request.

6. Specific Reporting Requirements:

Any exceedance over the opacity, particulate emissions, fuel oil usage, or sulfur dioxide limits as stated in this permit shall be reported to the Division as specified in Section F (6). The company shall also certify to the Division, annually, that a daily visible emission survey is conducted and the specified records are being kept for this emission point. If more than two exceedances occur in any rolling six months, the owner or operator shall submit to the Division's Owensboro Regional Office no later than 30 days from the second exceedance a corrective action plan for the Division's approval.



Permit Number: <u>V-98-008</u> **Page:** <u>10</u> **of** <u>26</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (continued)

13 (S6 & S7) Holding Furnaces

Description:

A SMD Model 80 holding furnace with a maximum processing rate of 13.7 tons of aluminum per hour and a maximum natural gas usage rate of 10.5 mmBTU / hr, with backups of No. 2 fuel oil and propane.

Construction commenced - 1989.

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations 401 KAR 59:105, New process gas streams Self-imposed limitations to preclude PSD

1. **Operating Limitations:**

Only natural gas, No. 2 fuel oil, and propane shall be used.

Combined fuel oil usage rate shall not exceed 91,000 gallons/month and the fuel oil sulfur content shall not exceed 0.5% .- Self imposed to preclude applicability of 401 KAR 51:017, Prevention of significant deterioration.

2. Emission Limitations:

Pursuant to Regulation 401 KAR 59:010:

- a) Visible emissions shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.
- b) Hourly particulate emissions as measured by Reference Method 5, Appendix A, 40 CFR 60, averaged over three hours shall not exceed the limit calculated by the following formula or a combined particulate emission rate of 5.6 lbs/hr (self-imposed) whichever is less:

$$E = 3.59 P^{0.62}$$

Where P is the process weight (total weight of all materials introduced into an emission unit which may cause the emissions of particulate matter) in tons/hour. If the process weight equals or is less than 0.5 ton/hour the particulate matter emission limitation shall be 2.34 lbs/hr.

Self-imposed limitation to preclude PSD:

- a) Combined hourly PM₁₀ emissions as measured by Reference Method 201 or 201a, Appendix M, 40 CFR 51, and averaged over three hours shall not exceed 3.4 lbs/hr.
- b) Combined sulfur dioxide emissions as measured by reference method 6 or 6c, Appendix A, 40 CFR 60, averaged over three hours shall not exceed 3.25 tons per month.

Pursuant to 401 KAR 59:105:

 SO_2 in the process gas stream shall not exceed 28.63 grains per 100 dscf at zero percent oxygen.

Permit Number: <u>V-98-008</u> Page: <u>11</u> of <u>26</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (continued)

3. Testing Requirements:

Compliance tests as required in Section D shall be conducted.

4. Specific Monitoring Requirements:

- a) To provide reasonable assurance that the visible emission limitations are being met the permittee shall:
 - i) perform from each stack or vent opacity readings using Reference Method 9 determine each calendar quarter, or more frequently if requested by the Division. Opacity readings shall be conducted while the emission units are operating.
 - ii) perform a qualitative visual observation of the opacity of emissions from each stack/vent on a daily basis and maintain a log of the observation. The log shall note:
 - 1) whether any air emissions (except for water vapor) were visible from the vent/stack,
 - 2) all emission points from which visible emissions occurred, and
 - 3) whether the visible emissions were normal for the process.
 - iii) determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent is perceived or believed to exceed the applicable standard.
- b) To provide reasonable assurance that the combined average particulate matter emission limitations (TSP and PM₁₀) are being met, the permittee shall monitor the amounts and types of process weight added to each emission unit. The process weight shall be determined in average hourly tons added to the emission units averaged over a one month period. Average particulate emissions shall be calculated as follows:

$$PE = PW \times PEF + Fuel$$

Where PE = Particulate emissions in lbs/hr, PW = process weight in tons/hr, PEF = particulate emission factor in lbs/ton of process weight, and Fuel = particulate emissions in lbs/hr as calculated below. The particulate emission factor shall be developed from compliance test required in Section D or other emission test or emission factor approved by the Division. If more than one type of fuel is used during the month the highest hourly fuel particulate emission rate shall be used to demonstrate compliance. Fuel emissions shall not be added for compliance with 401 KAR 59:010, but shall be added to comply with self-imposed limitations

Fuel particulate emissions shall be calculated as follows:

Fuel = particulate emission factor x hourly fuel usage averaged monthly.

The fuel particulate emission factor (expressed in the proper units) shall be the appropriate factor specified in <u>Compilation of Air Pollutant Emission Factor</u> (AP 42) or an emission test or emission factor approved by the Division.

c) To provide reasonable assurance that the sulfur dioxide emission limitations are being met, the permittee shall monitor monthly the amount, sulfur content, and the type of fuel oil used.

Permit Number: <u>V-98-008</u> Page: <u>12</u> of <u>26</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (continued)

5. Specific Record Keeping Requirements:

Records shall be maintained of the visual observations, calendar quarter Reference Method 9, combined amount and type of fuel oil used, the sulfur content of each fuel oil used, and the amount of process weight added to each emissions unit.

6. **Specific Reporting Requirements:**

Any exceedance over the opacity, particulate emissions, fuel oil usage, or sulfur dioxide limits as stated in this permit shall be reported to the Division as specified in Section F (6). The company shall also certify to the Division, annually, that a daily visible emission survey is conducted and the specified records are being kept for this emission point. If more than two exceedances occur in any rolling six months, the owner or operator shall submit to the Division's Owensboro Regional Office no later than 30 days from the second exceedance a corrective action plan for the Division's approval.



Permit Number: <u>V-98-008</u> **Page:** <u>13</u> **of** <u>26</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)_

21 (S8, S9) - 2 Melt/hold furnaces

Description:

12 mmBTU/ hr furnaces Construction commenced - 1998

APPLICABLE REGULATIONS:

401 KAR 59:010, New Process Operations 401 KAR 59:105, New Process Gas Streams Self-imposed limitations to preclude PSD Self-imposed state origin requirements

1. **Operating Limitations:**

Only natural gas, No. 2 fuel oil, and propane shall be used.

Combined fuel oil usage rate shall not exceed 91,000 gallons/month and the fuel oil sulfur content shall not exceed 0.5% .- Self imposed to preclude applicability of 401 KAR 51:017, Prevention of significant deterioration.

State Origin Limitations:

Only fluoride-free fluxing agents shall be used.

Only clean raw material shall be charged into the furnaces.

2. Emission Limitations:

Pursuant to Regulation 401 KAR 59:010:

- a) Visible emissions shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.
- b) Hourly particulate emissions as measured by Reference Method 5, Appendix A, 40 CFR 60, averaged over three hours shall not exceed the limit calculated by the following formula or a combined particulate emission rate of 5.6 lbs/hr (self-imposed) whichever is less.

$$E = 3.59 P^{0.62}$$

Where P is the process weight (total weight of all materials introduced into an emission unit which may cause the emissions of particulate matter) in tons/hour. If the process weight equals or is less than 0.5 ton/hour the particulate matter emission limitation shall be 2.34 lbs/hr.

Self-imposed limitation to preclude PSD:

- a) Combined hourly PM₁₀ emissions as measured by Reference Method 201 or 201a, Appendix M, 40 CFR 51, and averaged over three hours shall not exceed 3.4 lbs/hr.
- b) Combined sulfur dioxide emissions as measured by reference method 6 or 6c, Appendix A, 40 CFR 60, averaged over three hours shall not exceed 3.25 tons per month.

Permit Number: <u>V-98-008</u> **Page:** <u>14</u> **of** <u>26</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)_

21 (S8, S9) - 2 Melt/hold furnaces(continued)

2. <u>Emission Limitations:</u>(continued)

Pursuant to 401 KAR 59:105:

 SO_2 in the process gas stream shall not exceed 28.63 grains per 100 dscf at zero percent oxygen.

3. <u>Testing Requirements:</u>

Compliance tests as required in Section D shall be conducted.

4. **Specific Monitoring Requirements:**

- a) To provide reasonable assurance that the visible emission limitations are being met the permittee shall:
 - i) perform from each stack or vent opacity readings using Reference Method 9 determine calendar quarter, or more frequently if requested by the Division. Opacity readings shall be conducted while the emission units are operating.
 - ii) perform a qualitative visual observation of the opacity of emissions from each stack/vent on a daily basis and maintain a log of the observation. The log shall note:
 - 1) whether any air emissions (except for water vapor) were visible from the vent/stack.
 - 2) all emission points from which visible emissions occurred, and
 - 3) whether the visible emissions were normal for the process.
 - iii) determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent is perceived or believed to exceed the applicable standard.
- b) To provide reasonable assurance that the combined average particulate matter emission limitations (TSP and PM₁₀) are being met, the permittee shall monitor the amounts and types of process weight added to each emission unit. The process weight shall be determined in average hourly tons added to the emission units averaged over a one month period. Average particulate emissions shall be calculated as follows:

$$PE = PW \times PEF + Fuel$$

Where PE = Particulate emissions in lbs/hr, PW = process weight in tons/hr and PEF = particulate emission factor in lbs/ton of process weight, Fuel = particulate emissions in lbs/hr as calculated below. The particulate emission factor shall be developed from compliance test required in Section D or other emission test or emission factor approved by the Division. If more than one type of fuel is used during the month the highest hourly fuel particulate emission rate shall be used to demonstrate compliance. Fuel emissions shall not be added for compliance with 401 KAR 59:010, but shall be added to comply with self-imposed limitations.

Fuel particulate emissions shall be calculated as follows:

Fuel = particulate emission factor x hourly fuel usage averaged monthly.

Permit Number: <u>V-98-008</u> **Page:** <u>15</u> **of** <u>26</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

21 (S8, S9) - 2 Melt/hold furnaces(continued)

4. Specific Monitoring Requirements:(continued)

The fuel particulate emission factor (expressed in the proper units) shall be the appropriate factor specified in <u>Compilation of Air Pollutant Emission Factor</u> (AP 42) or an emission test or emission factor approved by the Division.

c) To provide reasonable assurance that the sulfur dioxide emission limitations are being met, the permittee shall monitor monthly the amount, sulfur content, and the type of fuel oil used.

5. **Specific Record Keeping Requirements:**

Records shall be maintained of the visual observations, calendar quarter Reference Method 9, combined amount and type of fuel oil used, the sulfur content of each fuel oil used, and the amount of process weight added to each emissions unit. These records shall be maintained for 5 years and made available for review upon request.

6. **Specific Reporting Requirements:**

Any exceedance over the opacity, particulate emissions, fuel oil usage, or sulfur dioxide limits as stated in this permit shall be reported to the Division as specified in Section F (6). The company shall also certify to the Division, annually, that a daily visible emission survey is conducted and the specified records are being kept for this emission point. If more than two exceedances occur in any rolling six months, the owner or operator shall submit to the Division's Owensboro Regional Office no later than 30 days from the second exceedance a corrective action plan for the Division's approval.

Permit Number: <u>V-98-008</u> **Page:** <u>16</u> **of** <u>26</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (continued)

22 (-) Rod/Cable mill:

Description:

Mini-mill, 1 coil per hour

No applicable requirements or limitations apply.

23(-) SNIF unit

Description:

Molten metal purifier that utilizes chlorine gas mixed with argon

No applicable requirements or limitations apply



Permit Number: <u>V-98-008</u> **Page:** <u>17</u> **of** <u>26</u>

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

1. Anneal	escription ling oven #1 m BTU / hr	Generally Applicable Regulation 401 KAR 61:020
	ling oven #2 m BTU / hr	401 KAR 61:020
	ling oven #3 BTU / hr	401 KAR 59:010
4. POT he 1.65 m	eaters m BTU / hr	401 KAR 59:010
5. Sow dr 1.0 mm	ryer nBTU / hr	401 KAR 59:010
6. Parts w 300 ga	vashers Ilons (4)	401 KAR 63:020
7. Weldin 10000		401 KAR 63:020 401 KAR 59:010
8. Settling 1 GPM		401 KAR 63:010
	er separator tanks) gallons (3)	None
10. Keros 550 g	sene tank allons	None
11. Diese 550 ga		None
12. Gasol 550 g	ine tank gallon	None
13. Lube 1 GP	oil fugitives M	401 KAR 63:020

Permit Number: <u>V-98-008</u> **Page:** <u>18</u> **of** <u>26</u>

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

<u>Description</u>

14. Propane tanks 30000 gallons

15. Plant roads
Approximately 1 mile

16. Dross storage

18. Cooling towers

Generally Applicable Regulation 401 KAR 63:020

401 KAR 63:010

401 KAR 59:010

401 KAR 63:010



Permit Number: <u>V-98-008</u> **Page:** <u>19</u> **of** <u>26</u>

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. Compliance tests:

- a) Within ninety (90) days after the effective date of the final permit the owner or operator shall conduct performance tests on the melt and holding furnaces for PM and PM10, and furnish the Division's Frankfort office a written report of the results of such performance tests. If the permittee demonstrates to the Divisions satisfaction that the furnaces are sufficiently similar or that the worst case furnace is tested, only one furnace may be tested. The permittee may use the particulate compliance test to demonstrate compliance with the PM10 emission limitation if all particulate emissions are assumed to be PM10.
- b) Performance tests shall be performed by the reference methods specified in Regulation 401 KAR 50:015, Section 1 and the averaging time shall be consist with the requirements specified in this regulation.
- c) The permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort office at least thirty (30) days prior to the date of the required performance tests. The Division shall be notified of the actual test date at least ten (10) days prior to the tests and given the opportunity to attend/observe the performance test.
- d) During the performance test the amount of process weight added to the furnaces shall be recorded and correlated to the average measured particulate and PM10 emissions.

2. State origin requirements:

- a) hydrogen fluoride emissions shall not exceed 0.00249 lb per hour or 18 percent of the fluoride present in the fluxing agent,
- b) aluminum oxide emissions shall not exceed 3.68 lb per hour, and
- c) chlorine emissions shall not exceed 9.37 lbs per hour.
- 3. Compliance with annual emissions and processing limitations imposed pursuant to 401 KAR 50:035, Section 7(1)(a), and contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months, unless otherwise specified.

SECTION E - CONTROL EQUIPMENT CONDITIONS

Not applicable

Permit Number: <u>V-98-008</u> **Page:** <u>20</u> **of** <u>26</u>

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:

- a. Date, place as defined in this permit, and time of sampling or measurements.
- b. Analyses performance dates;
- c. Company or entity that performed analyses;
- d. Analytical techniques or methods used;
- e. Analyses results; and
- f. Operating conditions during time of sampling or measurement;
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 50:035, Permits, Section 7(1)(d)2 and 401 KAR 50:035, Permits, Section 7(2)(c)]
- 3. In accordance with the requirements of Regulation 401 KAR 50:035, Permits, Section 7(2)(c) the permittee shall allow the Cabinet or authorized representatives to perform the following:
 - a. Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
 - b. Have access to and copy, at reasonable times, any records required by the permit:
 - i. During normal office hours, and
 - ii. During periods of emergency when prompt access to records is essential to proper assessment by the Cabinet;
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
 - i. During all hours of operation at the source,
 - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii. During an emergency; and
 - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
 - i. During all hours of operation at the source,
 - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii. During an emergency.

Permit Number: <u>V-98-008</u> **Page:** <u>21</u> **of** <u>26</u>

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be reported to the Division's Owensboro Regional Office no later than the sixmonth anniversary date of this permit and every six months thereafter during the life of this permit, unless otherwise stated in this permit. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of Regulation 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to Section 6(1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.
- 6. a. In accordance with the provisions of Regulation 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's Owensboro Regional Office concerning startups, shutdowns, or malfunctions as follows:
 - 1. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - 2. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
 - b. In accordance with the provisions of Regulation 401 KAR 50:035, Section 7(1)(e)2, the owner or operator shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by general condition 6 a. above) to the Division for Air Quality's Owensboro Regional Office.
- 7. Pursuant to Regulation 401 KAR 50:035, Permits, Section 7(2)(b), the permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality's Owensboro Regional Office and the U.S. EPA in accordance with the following requirements:
 - a. Identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status regarding each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent; and
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1)(c),(d), and (e).
 - e. The certification shall be postmarked by the thirtieth (30) day following the applicable permit issuance anniversary date.

Permit Number: <u>V-98-008</u> Page: <u>22</u> of <u>26</u>

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

8. In accordance with Regulation 401 KAR 50:035, Section 23, the permittee shall provide the division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission report is mailed to the permittee.

9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL CONDITIONS

(a) General Compliance Requirements

- 1. The permittee shall comply with all conditions of this permit. A noncompliance shall be (a) violation(s) of state regulation 401 KAR 50:035, Permits, Section 7(3)(d) and for federally enforceable permits is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition.
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 50:035, Permits, Section 12(2)(c);
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.;
 - c. The Cabinet or the U. S. EPA (for Federal permits) determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Permit Number: <u>V-98-008</u> **Page:** <u>23</u> **of** <u>26</u>

SECTION G - GENERAL CONDITIONS (CONTINUED)

(a) General Compliance Requirements (continued)

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- 4. The permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. [401 KAR 50:035, Permits, Section 7(2)(b)3e and 401 KAR 50:035, Permits, Section 7(3)(j)]
- 5. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [401 KAR 50:035, Permits, Section 7(3)(k)]
- 6. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [401 KAR 50:035, Permits, Section 7(3)(e)]
- 7. Except as identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.
- 8. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6). [401 KAR 50:035, Permits, Section 7(3)(h)]
- 9. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 50:035, Permits, Section 8(3)(b)]
- 10. This permit shall not convey property rights or exclusive privileges. [401 KAR 50:035, Permits, Section 7 (3)(g)]
- 11. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
- 12. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 50:035, Permits, Section 7(2)(b)5]

Permit Number: <u>V-98-008</u> **Page:** <u>24</u> **of** <u>26</u>

SECTION G - GENERAL CONDITIONS (CONTINUED)

- (a) General Compliance Requirements (continued)
- 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR to impose 50:035, Permits, Section 8(3)(a)]
- 14. <u>Permit Shield</u>: Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the affected facilities listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of issuance of this permit.
- 15. All previously issued operating permits are hereby null and void.

(b) Permit Expiration and Reapplication Requirements

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield. shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division.[401 KAR 50:035, Permits, Section 12]

(c) <u>Permit Revisions</u>

- 1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of Regulation 401 KAR 50:035, Permits, Section 15.
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority thirty (30) days in advance of the transfer.

(d) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

Permit Number: <u>V-98-008</u> **Page:** <u>25</u> **of** <u>26</u>

SECTION G - GENERAL CONDITIONS (CONTINUED)

(e) <u>Emergency Provisions</u>

1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and the permittee can identify the cause of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and.
- d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of 401 KAR 50:035, Permits, Section 7(1)(e)2, and include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.
- 2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement.
- 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 50:035, Permits, Section 9(3)]

(f) Risk Management Provisions

- 1. The permittee shall comply with all applicable requirements of 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall:
 - a. Submit a Risk Management Plan to U.S.EPA, Region IV with a copy to this Division and comply with the Risk Management Program by June 21, 1999 or a later date specified by the U.S.EPA.
 - b. Submit additional relevant information if requested by the Division or the U.S. EPA.

(g) Ozone depleting substances

- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

Permit Number: <u>V-98-008</u> **Page:** <u>26</u> **of** <u>26</u>

SECTION G - GENERAL CONDITIONS (CONTINUED)

(g) Ozone depleting substances (continued)

- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
- e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

SECTION H - ALTERNATE OPERATING SCENARIOS Not Applicable.

SECTION I - COMPLIANCE SCHEDULE

Not Applicable.

